

## Blacktip Settings - Pocket Guide

The following settings are specific to Blacktip app V1.19

**User should only adjust orange settings (White settings are for factory adjustment)**

Command	Definition	Explanation	Default
To change values type the command followed by the value. Example \$d4 sets the default speed to 4			
\$S	View Settings	Displays Current Blacktip Settings. No value required	
\$#	Reset all	Resets all settings to default. No Value required	
\$w	Magic	Not Used	27F3
\$d	Speed Default	Initial speed of the blacktip when starting	3
\$M	Maximum Speed	Sets the number of speeds available. Up to 8 Speeds can be used	8
\$U	Use Safety	Turn safe start on or off. 1 = On, 0 = Off.	1
\$T	Trigger on Time	Double click timing setting. Should be no reason to change this	400
\$t	Trigger Off Time	Double click timing setting. Should be no reason to change this	500
\$r	Ramp Rate	Speed ramp rate. The aggressiveness of the acceleration between speeds	1500
\$m	Migrate Rate	When you restart the scooter after releasing the trigger the scooter resumes at a speed based on the duration that you were off the trigger. The longer you are off the trigger the closer that restart speed is to the default gear. This setting controls how fast speed changes. Value is in milliseconds per gear.	5000
\$G	Guard High Value	Safe start high current setting. Should be no reason to change	6
\$g	Guard Low Value	Safe Start low current setting. Should be no reason to change	0.5
\$h	Guard Current Limit	Max permissible battery current when in safe start mode. Should be no reason to change	0.3
\$j	Guard ERPM Limit	ERPM speed in safe start mode. Should be no reason to change	900
\$k	Guard Max ERPM	Max Permissible ERPM in safe start mode. Should be no reason to change	1500
\$c	Safe Start Count	Number of current measurements setting the time duration of safe start mode. 50 is approximately 3 sec.	50
\$F	Fail Count	Number of failed current measurements required to exit safe start mode. Should be no reason to change	5
\$a	Current Filter	Safe Start current filter setting. Should be no reason to change	0.2
\$b	Display Brightness	Display Brightness	6
\$R	Display Rotation	Rotation of Display, 0-3 . Each number rotates display 90 deg.	1
\$p		how long to display battery status when initially connecting the power. Milliseconds	10000
\$f		how long to wait after coming off trigger until displaying the battery status. Milliseconds.	3000
\$D		how long to display battery status when coming off trigger. Milliseconds.	6000
\$n		How long to display the new speed when changing motor speeds. Milliseconds.	3500
\$i	Battery Inbalance voltage	Voltage difference at which display indicates there is a battery imbalance	2
\$x	Battery 2 resistor ratio	Set to 0 to disable if you keep getting battery errors	14
\$l	Logging Commands	Controls information shown in the terminal when monitoring controller on USB	0
		\$l0 --> turn all logging off	
		\$l1 = Speed log ON	
		\$l2 = Safety log ON	
		\$l4 = Display log ON \$l8 = Trigger log ON	Inc battery Voltages
\$S1	Speed 1 ERPM	ERPM setting for this gear	1525
\$S2	Speed 2 ERPM	ERPM setting for this gear	2300
\$S3	Speed 3 ERPM	ERPM setting for this gear	3100
\$S4	Speed 4 ERPM	ERPM setting for this gear	3525
\$S5	Speed 5 ERPM	ERPM setting for this gear	3900
\$S6	Speed 6 ERPM	ERPM setting for this gear	4150
\$S7	Speed 7 ERPM	ERPM setting for this gear	4450
\$S8	Speed 8 ERPM	ERPM setting for this gear	4850
\$L1	Speed 1 Current Limit	Current Limit for this gear	1
\$L2	Speed 2 Current Limit	Current Limit for this gear	2.2
\$L3	Speed 3 Current Limit	Current Limit for this gear	3.8
\$L4	Speed 4 Current Limit	Current Limit for this gear	6.2
\$L5	Speed 5 Current Limit	Current Limit for this gear	9.6
\$L6	Speed 6 Current Limit	Current Limit for this gear	12.8
\$L7	Speed 7 Current Limit	Current Limit for this gear	17
\$L8	Speed 8 Current Limit	Current Limit for this gear	22.8
\$B1		Battery Bar voltage settings, above this level 2 bars	34
\$B2		Battery Bar voltage settings, above this level 3 bars	36
\$B3		Battery Bar voltage settings, above this level 4 bars	38